

REMARKS

This Response is submitted in response to the Office Action of 12/23/2003.

Claims 1—105 were originally filed.

No claims were canceled.

No claims are newly added.

Accordingly, claims 1—105 are pending.

In view of the following remarks, Applicant respectfully requests reconsideration of the rejected claims.

Background

A system architecture integrates spreadsheet functionality into tables commonly used in word processing programs and HTML documents. The architecture presents a table user interface (UI) that appears as part of the document, and may be surrounded by text and other document elements. In an HTML document, for example, the table is an HTML element constructed along with other elements and rendered together as an integrated document. Once rendered, the table UI visually resembles a table in a non-editing mode and a spreadsheet in an editing mode. The feel of the table, however, remains much like a word processing table in that a user can type multiple paragraphs, create lists, split cells, and so forth. However, unlike typical word processing tables, the table supports full spreadsheet functionality.

Underlying the table UI, one implementation of the architecture separates data handling functions from presentation functions. The architecture includes a table appearance manager to manage how the table appears in a document

1 including such characteristics as table resizing, selection, cut, copy, paste, split,
2 merge, table formatting and so on. The architecture also has a spreadsheet
3 functionality manager to manage the spreadsheet functions for the table, such as
4 recalculation, formula handling, sorting, referencing, and the like.

5 The bifurcated architecture supports cross-table referencing in which a cell
6 in one table can reference a cell in another table in the same document, even
7 though the tables are separate from one another. As part of the cross-table
8 referencing, the architecture allows a user to reference the cell in the other table
9 using a reference edit operation (e.g., move pointer to cell and click to capture
10 content in the cell). The architecture further accommodates automatic universal
11 recalculation throughout all tables in the document. Thus, when a user modifies
12 the contents of one table, the architecture automatically recalculates any formulas
13 in any tables affected by the modification.

14 The architecture also supports nested table structures in which one table is
15 nested within a cell of another table. Many other architectural features and UI
16 features are also described.

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18 **35 U.S.C. §102**

19 Claims 1, 3—41, 43, 44, 46—48, 50, 51, 53—58, 69, 71, 75—78, 81, 85,
20 86, 92—95, 97—103 and 105 were rejected under 35 USC 102(b) as being
21 anticipated by U.S. patent 5,630,126, herein after “Redpath.”
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The Redpath Reference

The Redpath reference teaches creating and integrating computations within compound documents. In particular, Redpath teaches creation of a compound document having a document text part and a plurality of math parts positioned in a plurality of locations. A selected first set of math parts within the compound document is expressed as computational functions of a second math part contained within the compound document. If a value is assigned to the second math part, the computational functions of each math part in the selected first set are automatically reevaluated and displayed.

Significantly, Redpath does not disclose the use of tables within the compound document, and in particular does not disclose the use of tables in either portion of the compound document. Instead, Redpath shows only the conventional use of text and spreadsheet elements mixed to form a compound document.

Traversal of Section 102(b) rejections

Claim 1 recites “a table appearance manager to manage how a table appears in a document” and “a spreadsheet functionality manager to manage spreadsheet functions for the table.”

The use of tables and table managers is not seen in the Redpath reference. Instead, Redpath discloses a compound document with a text part and a math part. The text part of the Redpath compound document is not actually a “table.” Tables are a construct included within some documents produced by some word processing applications. For example, an advanced word processor like the

1 Word® word processor includes table functionality within a table menu seen
2 between the “tools” and “help” menus. Lesser word processors do not even have
3 table support. *Nothing in the Redpath reference would lead to the conclusion that*
4 *Redpath actually discloses table support.* Redpath has a text part and a math part,
5 *but not tables.* Additionally, Redpath does not disclose the combination of tables
6 and spreadsheets.

7 However, the Patent Office suggests that the Redpath reference shows the
8 use of a table appearance manager at col. 2, lines 45—48; col. 4, lines 4—5 and
9 19—22; and at col. 6, lines 10—14 and 43+. The Applicant respectfully
10 disagrees.

11 In fact, the Patent Office fails to disclose a reference having a table in the
12 context of word processing. In contrast to the Patent Office’s apparent
13 understanding, tables provide a somewhat spreadsheet appearance to word
14 processing documents by arranging textual data in columns and rows. As seen in
15 the Background of the Applicant’s disclosure (application page 2, lines 3—11)
16 tables are an evolution of word processing programs, and somewhat resemble
17 spreadsheets, but have fundamental differences. The Redpath reference fails to
18 disclose the use of tables.

19 In particular, a closer review of each passage in Redpath referenced above
20 reveals that Redpath is not actually configured to create or manage tables. Instead,
21 Redpath provides *conventional, non-table, text editing* (combined with math
22 parts). In column 2 lines 45—48, Redpath simply mentions the use of text and
23 math parts. *Nothing in this passage indicates that tables are supported by the text*
24 *part.* In column 4 lines 4—5, Redpath discussed how math parts may be located
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1 within the text parts. In the column 6 citation, Redpath discusses the structure and
2 operation of the math parts, but does not disclose tables.

3 Thus, Redpath does not disclose the concept of “tables.” Accordingly,
4 because Redpath does not disclose tables, Redpath also does not disclose an
5 appearance manager to manage how a table appears in a document. Similarly,
6 Redpath does not disclose the novel combination of using a spreadsheet
7 functionality manager to manage spreadsheet functions for the table.

8 As a result, Redpath does not disclose each and every element of claim 1,
9 and the section 102 rejection of claim 1 should be removed.

10 Claims 3—13 depend from claim 1 and are allowable by virtue of their
11 dependence on allowable claims, as well as due to the allowability of the elements
12 recited in each claim.

13 For example, Claim 3 recites “wherein the table appearance manager
14 provides a formula edit box to permit the user to enter a formula into a cell of the
15 table.” Redpath shows formula entry (Fig. 6 and col. 3 lines 9—11) *into a math*
16 *part*. However, Redpath fails to disclose letting the user “enter a formula into a
17 cell of the table.” Therefore, Redpath fails to show an architecture wherein “a
18 formula edit box” allows entry *into a table*—instead, Redpath shows formula entry
19 *into a math part*. Accordingly, claim 3 should be allowed.

20 Claim 14 recites “a user interface to present a document containing text and
21 a table.”

22 The Redpath reference fails to disclose a user interface which presents “text
23 and a table.” As seen above, Redpath presents a document which includes text,
24 *but no table*.

1 The Patent Office suggests that support for the use of tables is seen in
2 Redpath in Figs. 6 and 8, the Abstract and other locations. The Applicant
3 respectfully disagrees.

4 In fact, Redpath's Fig. 6 shows a user interface dialog box for entry of
5 formulas into math parts (col. 4, lines 43—45), not a table. Redpath's Fig. 8
6 shows a document having text and spreadsheet elements (the math parts).
7 *However, the text is simple; i.e. it is not organized into a table.* Similarly, the
8 Abstract does not disclose any type of table.

9 Claim 14 additionally recites “a table management system to manage how
10 the table appears in the document.”

11 The Redpath reference fails to disclose tables generally, and more
12 specifically, fails to disclose “a table management system to manage how the table
13 appears in the document.” Because the Redpath reference does not disclose tables,
14 it does not disclose table management.

15 The Patent Office suggests that table management is seen in col. 2 lines
16 45—48; col. 4, lines 4—5 and 19—22; and col. 6, lines 10—14 and 43+. The
17 Applicant respectfully disagrees.

18 In fact, as the Patent Office readily admits, the material in the cited
19 passages shows the operation of the math cells within a text document, and are for
20 the Applicant to “compare with table appearance manager” (Office Action, top of
21 page 8). The Applicant stresses Redpath is managing the operation of the math
22 parts in the cited passages (as the Office Action admits) and is therefore not
23 managing tables of any type. In contrast, the Applicant's claim recited “a table
24 management system to manage how the table appears in the document.” Thus, the
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1 Applicant's claim recites a management system to manage tables (i.e. word
2 processing structures) wherein the Redpath elements recited manage math parts (a
3 spreadsheet structure). Thus, Redpath's text parts are not organized as tables—
4 accordingly Redpath does not disclose a table management system.

5 Claim 14 additionally recites that the table management system is provided
6 "to manage spreadsheet functions for the table."

7 The Redpath reference fails to disclose "a table management system to
8 manage how the table appears in the document and to manage spreadsheet
9 functions for the table." That is, Redpath fails to disclose management of both
10 table appearance and spreadsheet functions. In particular, Redpath does not show
11 management of table appearances.

12 The Patent Office suggests that col. 4, lines 3—31; col. 6, lines 7—28 and
13 other locations recite the management of spreadsheet functions. The Applicant
14 respectfully disagrees that these citations disclose "a table management system to
15 manage how the table appears in the document and to manage spreadsheet
16 functions for the table."

17 In fact, within these passages Redpath discloses the interspersal of math
18 parts within text. The "ragged" spreadsheet is one example of this interspersal.
19 However, tables are not seen within the Redpath reference. As a result, Redpath
20 does not teach the table management system, recited by the Applicant's claim,
21 which manages how the table appears in the document and to manage spreadsheet
22 functions for the table. Accordingly, the section 102 rejection of claim 14 should
23 be removed.
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1 Claims 15—21 depend from claim 14 and are allowable by virtue of their
2 dependence on allowable claims, as well as due to the allowability of the elements
3 recited in each claim.

4 Claim 22 recites in part “a complementary pair of spreadsheet and grid
5 components for each table in the document.” In the example of Fig. 1 of the
6 Applicant’s specification, spreadsheet and grid components 106, 130 are part of
7 the spreadsheet functionality manager and table appearance manager, respectively.
8 That is, the “complementary pair of spreadsheet and grid components” is part of
9 the software architecture which integrates spreadsheet functionality into word
10 processing tables.

11 Redpath does not disclose such an architecture including software
12 structures which support the document seen in Redpath’s Fig. 8. In spite of this,
13 the Patent Office suggests that col. 4, lines 3—31 and col. 6, lines 7—28 disclose
14 the spreadsheet and grid components. However, a review of these columns reveals
15 only a discussion (in column 4) of the appearance of the compound document, i.e.
16 the “ragged spreadsheet”, and (in column 6) a discussion of the method of
17 integrating computations of the compound document. Nothing in either column of
18 Redpath discloses the spreadsheet and grid components. For example, it is unclear
19 what element disclosed by Redpath (i.e. which reference designator) the Patent
20 Office thinks is analogous to the spreadsheet component, and what element
21 disclosed by Redpath (i.e. which reference designator) the Patent Office thinks is
22 analogous to the grid component. Further clarification on this point, in particular,
23 is required to more fully address the rejection.

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1 Claims 23—33 depend from claim 22 and are allowable by virtue of their
2 dependence on an allowable claim, as well as due to the allowability of the
3 elements recited in each claim.

4 Claim 34 recites “an architecture comprising: a document renderer to
5 render a document containing at least one table” and other elements.

6 Redpath does not disclose rendering a document with a table. The
7 arguments seen above are incorporated here, and it is stressed that tables are a
8 construct not seen or mentioned in Redpath.

9 Although the Patent Office is not clear on this point, it appears that the
10 Patent Office suggests that column 4, lines 3—31 and column 6, lines 7—28
11 disclose rendering a document containing at least one table. The Applicant
12 respectfully disagrees.

13 In fact, the cited passages in Redpath do not show “rendering a document
14 with a table.” The cited passages disclose the math parts, and discuss their
15 distribution, calculation and reevaluation. However, the spreadsheet-like math
16 parts are not a “table.” Moreover, the cited passages do not show a document
17 renderer to render a document containing at least one table. Accordingly, the
18 section 102 rejection of claim 34 is appropriately removed.

19 Claims 35—40 depend from claim 34 and are allowable by virtue of their
20 dependence on an allowable claim, as well as due to the allowability of the
21 elements recited in each claim.

22 Claim 41 recites in part “a first spreadsheet component to receive at least
23 one of data or a first formula entered into a first cell in the first table”.
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1 The Patent Office indicates that column 4, lines 3—31 and column 6, lines
2 7—28 show the elements recited. The Applicant respectfully disagrees.

3 In fact, the recited sections actually show the structure and operation of the
4 “math parts.” The math parts are defined on the document; for example Fig. 8 of
5 the Redpath reference shows display of the math parts.

6 In contrast, the recited *spreadsheet component* is part of an architecture
7 which separates data handling functions from presentation functions of the
8 integrated table/spreadsheet. In one example, the architecture is characterized as a
9 cooperation of two system managers: a table appearance manager and a
10 spreadsheet functionality manager. Within the table appearance manager, the
11 spreadsheet component is configured to provide editing functionality for the table,
12 including—in one example—such functions as table resizing, selection, cut, copy,
13 paste, split, merge, table formatting, and a host of other rich spreadsheet events.
14 (See generally the Applicant’s spec. page 8 lines 11—25 and page 10, lines 11—
15 20.)

16 Thus, the Patent Office is comparing parts of the Redpath document (i.e.
17 the math parts) to a part (i.e. the spreadsheet component) of the Applicant’s table
18 appearance manager. Such a comparison is inappropriate because it compares
19 parts of a document (the math parts) with a manager which assists in “receiving”
20 data or a formula. In a similar fashion, the Patent Office compares a second
21 spreadsheet component to operation of the math parts. Accordingly, removal of
22 the section 102 rejection of claim 41 is appropriate.
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1 Claims 43, 44 and 46—50 depend directly or indirectly from claim 41 and
2 are allowable by virtue of their dependence on an allowable claim, as well as due
3 to the allowability of the elements recited in each claim.

4 Claim 51 recites in part “presenting a table within a document” and
5 “receiving data and at least one formula referencing the data entered into the
6 table.” Claims 69 and 78 recite similar actions.

7 The Patent Office indicates that various sections, discussed with reference
8 to other claim rejections, above, disclose the recited elements. The Applicant
9 respectfully disagrees.

10 In fact, the Redpath reference does not show “presenting a table within a
11 document.” Redpath discloses the use of text and spreadsheets, such as the
12 “ragged spreadsheets” discussed in column 4. Redpath is akin to object-oriented
13 programming and OLE technologies that have been used to provide a richer
14 integration experience. With Redpath as with OLE, word processing users who
15 want greater functionality can embed spreadsheet objects into their word
16 processing documents, instead of tables. Essentially, this is akin to embedding an
17 Excel® spreadsheet (or other spreadsheet program) into a document running on
18 the Word® program (or other word processing program). The embedded object
19 carries sufficient functionality to allow the user to enter formulas, format cells,
20 recalculate functions, and do all of the things he/she would normally be able to do
21 on a spreadsheet program.

22 However, such spreadsheets—or math parts—as they are referred to by
23 Redpath, are distinct from the tables recited by the Applicant’s claims. Redpath is
24 not “presenting a table within a document.” Instead, Redpath is providing a text
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1 document, having interspersed therein a plurality of spreadsheet components, the
2 “ragged spreadsheet” (Redpath col. 4, lines 1—10), which are referred to
3 throughout as “math parts.” Thus, Redpath fails to disclose actual tables, and
4 additionally fails to disclose functionality wherein data is received “and at least
5 one formula referencing the data entered into the table.”

6 Accordingly, it would be appropriate to remove the section 102 rejection of
7 claims 51, 69 and 78.

8 Claims 53—58 depend from claim 51 and are allowable by virtue of their
9 dependence on an allowable claim, as well as due to the allowability of the
10 elements recited in each claim. Similarly, claims 71 and 75—77 depend from
11 claim 69 and are allowable by virtue of their dependence on allowable claims, as
12 well as due to the allowability of the elements recited in each claim. And, claim
13 81 depends from claim 78 and is allowable by virtue of its dependence on an
14 allowable claim, as well as due to the allowability of the elements recited in each
15 claim.

16 Claims 85, 92, 93, 95, 97 and 98 are allowable for substantially the same
17 reasons as the independent claims seen above. The arguments seen above are
18 hereby incorporated by reference with respect to the above-listed claims.

19 Claims 86, 94, 99—103 and 105 depend from one of the claims listed
20 immediately above and are allowable by virtue of their dependence on an
21 allowable claim, as well as due to the allowability of the elements recited in each
22 claim.
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35 U.S.C. §103 Rejections Using Redpath and Burch

Claims 2, 42, 45, 49, 52, 59-68, 70, 73, 74, 79, 82—84, 96 and 104 were rejected under 35 USC 103(a) as being unpatentable over Redpath in view of U.S. patent number 6,088,708, hereinafter “Burch.”

Traversal of Section 103(a) Rejections in View of Redpath and Burch

The Burch reference is commonly assigned with the instant application. The Burch reference issued after the filing date of the instant application. Accordingly, the Burch reference is not prior art with respect to the instant application. (MPEP 706.02(1)(1)).

Accordingly, claims 2, 42, 45, 49, 52, 59-68, 70, 73, 74, 79, 82—84, 96 and 104 are in condition for allowance.

35 U.S.C. §103 Rejections Using Redpath and Curbow

Claims 80 and 87—91 were rejected under 35 USC 103(a) as being unpatentable over Redpath in view of U.S. patent no. 5,669,005, hereinafter “Curbow.”

The Curbow Reference

Curbow reference teaches a document-centered user interface architecture for a computer system which employs parts as the fundamental building blocks of all documents. All data is stored in the system as a part, which is comprised of contents and an associated editor. The contents and the functionality of the editor are available to the user wherever the part is located, whether in a document, on a

1 desktop or in a folder. Parts function as containers for other parts, thereby
2 facilitating the compilation and editing of multimedia or compound documents.
3 When material from one part is inserted into another part, the computer system
4 automatically determines whether the added material is incorporated into the
5 intrinsic contents of the receiving part or embedded as a separately identifiable
6 part.

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8 **Traversal of Section 103(a) rejections**

9 Claim 80 is dependent on claim 78 and is allowable for this reason, as well
10 as for reasons associated with the elements recited in the claim.

11 Claim 87 recites in part “evaluating the text and the spreadsheet table
12 concurrently for possible spelling or grammatical errors.”

13 The Patent Office agrees with the Applicant that the Redpath reference does
14 not disclose the above-recited element (Office Action page 44, lower half of page).
15 The Patent Office suggests that Curbow remedies this failure. The Applicant
16 respectfully disagrees.

17 In fact, Curbow does not mention “errors” generally, or either “spelling
18 errors” or “grammatical errors” in particular. For example, Curbow does not
19 disclose any type of spelling error evaluation procedure.

20 The Patent Office suggests that the recited elements are shown in column 5,
21 lines 44-46 and in column 17, lines 60—65.

22 However, as can be seen in column 5, lines 44—46, Curbow is really
23 saying only that “the textual content 50 can be edited within the document, for
24 example by using the same word processor that was used to originally create the
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1 text.” This is not the same thing as “evaluating the text *and the spreadsheet table*
2 concurrently for possible spelling or grammatical errors.” The passage recited in
3 Curbow does not disclose any way in which the word processor can be used to
4 evaluate the spreadsheet table for spelling errors. Curbow only talks about how
5 the text can be edited with the text editor.

6 Thus, Curbow does not disclose how text and a spreadsheet table can be
7 concurrently evaluated for spelling and grammatical errors. Accordingly, the
8 section 103 rejection of claim 87 should be removed.

9 Claim 88 depends from claim 87, and is allowable by virtue of this
10 dependence.

11 Claim 89 recites in part “applying the control function across both the text
12 and the spreadsheet table.” In contrast, the Curbow reference discloses how a text
13 part—even when embedded within a non-textual document such as a
14 spreadsheet—can be edited by the user-selected word processor.

15 However, the Patent Office suggests that Curbow discloses the recited
16 elements between column 2, line 66 and column 3 line 9.

17 This is not the case, however, as Curbow is actually disclosing how a
18 “word processor can be used to edit the textual contents of the part, wherever they
19 may be embedded. Thus, even if the part is embedded within a non-textual
20 document, e.g. a spreadsheet, the textual contents of the part can still be edited
21 with the user-selected word processor” (Curbow, col. 3, lines 4—9).

22 Thus, Curbow said that even when text is inserted into a spreadsheet, that
23 the text can be edited with a word processor. In contrast, the Applicant’s claim
24 recites that a control function is applied across both the text and the spreadsheet.
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1 Thus, Curbow's disclosure of editing text, even if the text part is embedded in a
2 spreadsheet, is not the same thing as "applying the control function across both the
3 text and the spreadsheet table."

4 Claims 90 and 91 are allowable due to their dependence on claims that are
5 allowable for the reasons seen, above, as well as for reasons associated with
6 elements recited in each claim.

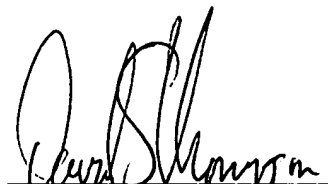
7 **Conclusion**

8 The Applicant submits that all of the claims are in condition for allowance
9 and respectfully requests that a Notice of Allowability be issued. If the Office's
10 next anticipated action is not the issuance of a Notice of Allowability, the
11 Applicant respectfully requests that the undersigned attorney be contacted for the
12 purpose of scheduling an interview.

13 In the event that the Examiner finds any remaining impediment to a prompt
14 allowance of this application that could be clarified over the telephone, the
15 Examiner is respectfully requested to call the undersigned attorney.

16 Respectfully Submitted,

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18 Dated: 4-30-04

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